



UK Automotive

Low Carbon Business Development Visit
10 – 15 October 2010

David Croxson
SMMT Head of International

UK presentations today

- **SMMT and UK Low Carbon Automotive**
Mr David Croxson – Head of International SMMT
- **The UK and European Electric Vehicle Industry**
Ms Catherine Hutt – EV Business Development Manager SMMT
- **Managing Growth: Sustainability Model**
Dr. Geoff Davis – Business Development Director MIRA
- **Building infrastructure and the manufacturing base for low carbon vehicles**
Mr Sean Long – Automotive & LCV Senior Sector Specialist, One North East
- **Low Carbon Vehicle Technologies in the Heart of England**
Mr Charles Rowell - Vice President, North America Advantage West Midlands

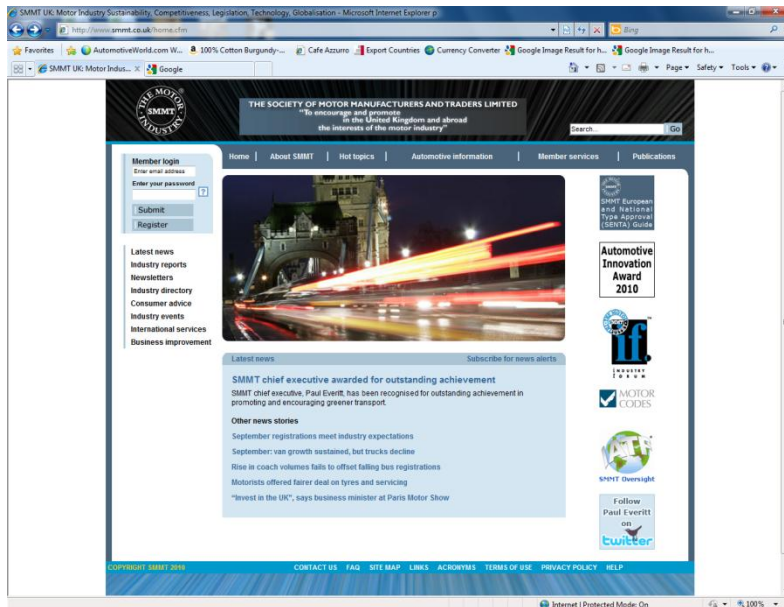
An introduction to SMMT

The Society of Motor Manufacturers and Traders (SMMT) is the principal representative of the UK motor industry

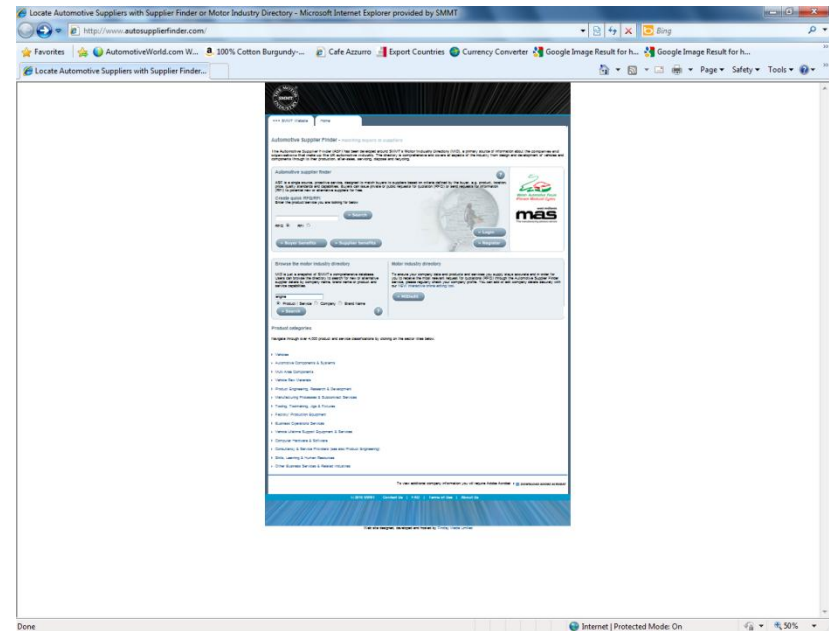
- Since 1904 - representing the industry www.smmt.co.uk
- Liaising with UK government – Automotive Council. Contact with EU Commission and trade bodies to influence national and international standards and legislation – and help members access UK and European government funding
- Organising exhibitions (British International Motor Show and annual Commercial Vehicle Show) and representing industry and taking UK mission / exhibitor groups overseas
- Providing data services - acknowledged as reliable, accurate and comprehensive
- Expert support on technical and vehicle legislation, e-business, quality, environment, education and training

SMMT website

<http://www.smmt.co.uk/>



<http://www.autosupplierfinder.com/>



Member services reports:

<http://www.smmt.co.uk/memberservices/index.cfm?catid=3974&sid=279>

UK Market Overview

- Mature market, 4th largest car producer in EU*
- Within the EU, UK has attracted highest number of inward investments by Japanese auto-parts manufacturers - investment in the UK peaked twice in 1990 and 2000
- VM / Tier 1s - principally foreign-owned
- Creation of a UK Automotive Council – provides framework for collaboration with Government to improve the UK investment offer
- Positioning of UK as centre for ultra low carbon development and manufacture – ICE / Hydrogen / Fuel Cell / EV / Hybrid
- Car production rose to over 1.5m vehicles in 2007 but fell back under 1m in 2009 due to global recession - exports increased from almost 65% of output in 2000 to over 76% in 2009
- Commercial vehicle production was consistently over 200,000 units for 5 years from 2004 but fell back to 90,000 vehicles in 2009 unsupported by scrappage scheme but exports increased to 77.5% in 2009 – the highest ever

* Source OICA

UK Market Overview

- Industry worth almost £52 billion and over 11% of the UK's total exports
- 31 key manufacturing sites:
car, light & heavy commercial vehicle, bus, coach, trailer, engine plants
- 4,000 component suppliers - <http://www.autosupplierfinder.com/>
- Many foreign vehicle manufacturers now have UK-based R&D centres
 - E.g. Nissan at Cranfield; Ford at Dunton; SAIC at Leamington Spa; Changan at Nottingham; TATA at Warwick.
- The UK has become a global base for engine manufacture
> 2 million p.a. in 2009 (>3.1m in 2008)
- The industry employs around 820,000 people

UK Market Overview

- 17 car and 8 commercial vehicle manufacturing sites including 7 volume car manufacturers
- 8 out of 12 Formula 1 teams are based in the UK and more motorsport / specialist car makers than any other European country
- Strong manufacturing base because of the long tradition of automotive engineering with an open door investment policy which has attracted the global manufacturers
- 19 of the world's top 20 Tier 1 system suppliers and component manufacturers are located in the UK
- Government focus and incentives particularly supporting development of hybrid and electric vehicles
- Automotive Council Technology Roadmap - UK R&D direction

Key elements of the sector

- Manufacture of both volume and niche vehicles and components for passenger cars, commercial trucks, buses and coaches
- Aftermarket and accessory component manufacture
- Strong powertrain sector with scale
- Low Carbon revolution – technology
- Strong Premium and Niche sectors
- Electric vehicle development and manufacture
- Strong independent design engineering base
- Motor sport and F1 design, development and manufacture
- Construction equipment and components
- Highly sophisticated retail and distribution service
- Established VOSA testing; maintenance and service centres
- HE academic study & research and FE training

UK Design and Engineering Skills

- Vehicle conceptualisation and styling
- Product planning and development
- Engine engineering
- Vehicle body, chassis, powertrain & trim
- Structural analysis & vehicle simulation
- Manufacturing engineering/feasibility
- Rapid prototyping services
- Testing and validation, homologation
- Special training packages (for CAE, CAM)
- Electrical and electronics, chip designing
- Vehicle component development

Low Carbon Automotive Directory

The full spectrum of UK low carbon automotive capabilities and academic research and development, production, consultants, training and aftermarket featuring:

- Advanced Materials & Fluids
- Specialist Manufacturing
- Engines & Engine Components
- Transmissions & Drive Trains
- Energy Recovery & Storage
- Electrical Recharging Infrastructure
- Low Carbon Fuels & Infrastructure
- Emissions Control
- Systems Integration & Power Management
- Design & Simulation
- Monitoring & Evaluation
- End of Life Vehicle Recycling
- Fuel Cells

http://www.low-carbon-ktn.org.uk/public/info_/LowCarbon/B6237%20Low%20Carbon%202010%20web%20pdf2.pdf

Why Inward Investors Choose the UK

- Our location

- Excellent connectivity, a gateway to Europe access to the 500 million people in 27 EU member states
- London is the financial capital of Europe

- Our workforce

- Some of the best Universities in the world, a workforce of 30 million that is highly trained, qualified, flexible and excellent industrial relations.

- Our Infrastructure

- Stable economic and political environment
- One of the most open, competitive and transparent tax, security and regulatory environments in the world, positive company and IP law,
- Access to a strong investment community, investment support, grant schemes, R&D tax credits
- Cheap, modern, reliable telecommunications, road, rail, network, air / sea hub
- UKTI single point support

Most importantly....

- Our industry capability
 - English speaking, internationally aware / connected, flexible and diverse labour force
 - Extensive, sophisticated & established vehicle and parts cluster
 - World-leading hub of innovation and R&D
 - The strength and direction of the Automotive Council and Government support for automotive R&D and manufacturing
 - UK positioning as a world leader in the development, demonstration, manufacture and use of **ultra-low carbon** automotive technology

BMW Mini



The UK is leading the change for new transport low carbon technologies and reducing production and usage emissions



Thank You

David Croxson

Head of International

dcroxson@smmt.co.uk

0044 (0)20 7344 9230

SMMT

Forbes House

Halkin Street

London, SW1X 7DS

www.smmt.co.uk